

Serial No.: 09/742,148  
Filed: December 19, 2000

aa<sup>89</sup> is any amino acid;

aa<sup>90</sup> is any amino acid; and

aa<sup>91</sup> is any amino acid;

C3 the dimer or at least one amino acid being the D-stereoisomer.

15. (amended) A compound according to Claim 14, wherein said compound is of the formula:

R V/E N/D L R I A/L L R/E Y Y W Q/D S (SEQ ID NO: 3)

wherein the backslashes intend that either amino acid may be present at that position.

16. A compound according to Claim 15 of at least 10 amino acids including the sequence N L R I A L R Y Y W.

17. A compound comprising at least two oligopeptides according to Claim 14 joined at their C terminus to a polylysine.

On page 26, immediately preceding the claims, insert the enclosed text entitled "SEQUENCE LISTING".

REMARKS

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Attached hereto is a marked-up version of the changes made to the specification by the current amendment. The attached page is captioned "Version with markings to show changes made."

These amendments are made in adherence with 37 C.F.R. § 1.821-1.825. This amendment is accompanied by a floppy disc containing the above named sequence, SEQUENCE ID NUMBERS 1-57, in computer readable form, and a paper copy of the sequence information. The computer readable sequence listing was prepared through use of the software program "Patent-In" provided by the PTO. The information contained in the computer readable disk is identical to that of the paper copy. This amendment contains no new matter. Applicant submits that this amendment, the accompanying computer readable sequence listing, and the paper copy thereof serve to place this application in a condition of adherence to the rules 37 C.F.R. § 1.821-1.825.

Please direct any calls in connection with this application to the undersigned at (415) 781-1989.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

Paragraph beginning at page 3, line 16, has been amended as follows:

-- Methods and compositions are provided for modulating lymphocytic activity, particularly CTL and NK cell activity, *in vitro* and *in vivo*. The compositions comprise oligopeptides of at least 6 amino acids comprising the tripeptide or triad (SEQ ID NO: 1) TYR-TYR-TRP (YYW), preferably the tetrapeptide (SEQ ID NO: 2) ARG-~~TRY~~-TYR-TYR-TRP (RYYW).--

Paragraph beginning at page 4, line 17, has been amended as follows:

-- For the most part, the oligopeptides will have at least 6, usually at least 8, amino acids, include the triad and come within the following formula: aa<sup>70</sup> aa<sup>71</sup> Q aa<sup>73</sup> aa<sup>74</sup> R aa<sup>76</sup> aa<sup>77</sup> L aa<sup>79</sup> aa<sup>80</sup> aa<sup>81</sup> aa<sup>82</sup> aa<sup>83</sup> Y Y W aa<sup>87</sup> aa<sup>88</sup> aa<sup>89</sup> aa<sup>90</sup> aa<sup>91</sup> (SEQ ID NO: 57).--

IN THE CLAIMS:

The section beginning on page 26, line 1, entitled "What Is Claimed Is" has been amended as follows:

--WHAT IS CLAIMED IS:

1. (amended) A method of inhibiting activation of CTL and NK cells, said method comprising:

combining said cells with an activation inhibiting amount of a compound comprising an oligopeptide of at least 6 amino acids comprising a contiguous sequence of the HLA-B  $\alpha_1$  domain or species analog thereof, wherein amino acids 84 to 86 are YYW (SEQ ID NO: 1);

whereby activation of said cells is inhibited.

2. (amended) Method according to Claim 1, wherein said oligopeptide is of at least 8 amino acids and amino acids 83 to 86 are RYYW (SEQ ID NO: 2).

7. (amended) A method of inhibiting activation of CTL and NK cells, said method comprising:

combining said cells with an activation inhibiting amount of a compound comprising an oligopeptide of at least 6 amino acids, including the triad YYW (SEQ ID NO: 1) and comprising a contiguous sequence of the sequence:

aa<sup>70</sup> aa<sup>71</sup> Q aa<sup>73</sup> aa<sup>74</sup> R aa<sup>76</sup> aa<sup>77</sup> L aa<sup>79</sup> aa<sup>80</sup> aa<sup>81</sup> aa<sup>82</sup> aa<sup>83</sup> Y Y W aa<sup>87</sup> aa<sup>88</sup> aa<sup>89</sup> aa<sup>90</sup> aa<sup>91</sup> (SEQ ID NO: 57).

wherein:

aa<sup>70</sup> is Q, H, S, N or K;

aa<sup>71</sup> is an aliphatic neutral amino acid;

aa<sup>73</sup> is T or A;

aa<sup>74</sup> is Y or H;

aa<sup>76</sup> is aliphatic neutral amino acid;

aa<sup>77</sup> is S or N;

aa<sup>79</sup> is R or G;

aa<sup>80</sup> is T, I, N or an aromatic amino acid;

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aa<sup>81</sup> is an aliphatic non-polar amino acid;

aa<sup>82</sup> is R, L or an aromatic amino acid;

aa<sup>83</sup> is G or R;

aa<sup>87</sup> is any amino acid;

aa<sup>88</sup> is an aromatic amino acid or aliphatic amino acid of from 5 to 6 carbon atoms;

aa<sup>89</sup> is any amino acid;

aa<sup>90</sup> is any amino acid; and

aa<sup>91</sup> is any amino acid;

whereby activation of said cells is inhibited.

8. (amended) A method according to Claim 7, wherein said oligopeptide is of at least 8 amino acids, is the dimer thereof, or at least one of the amino acids is the D-stereoisomer and is of the formula:

R V/E N/D L R I A/L L R/E Y Y W Q/D S (SEQ ID NO: 3)

wherein the backslashes intend that either amino acid may be present at that position.

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10. (amended) In a method for transplanting a donor mammalian organ or cells other than as part of a viable organ to a mammalian recipient, which method comprises:

isolating said donor organ or cells from said donor and implanting said donor organ or cells in said recipient, the improvement which comprises at least one of the following steps:

(a) combining said organ or cells prior to implanting in said mammalian recipient with an activation inhibiting amount of a compound comprising an oligopeptide of at least 6 amino acids comprising a contiguous sequence of the HLA-B  $\alpha_1$  domain or species analog thereof, wherein amino acids 84 to 86 are YYW (SEQ ID NO: 1); or

(b) administering to said mammalian recipient in a period extending from prior to subsequent to implanting said donor organ or cells an activation inhibiting amount of a compound comprising an oligopeptide of at least 6 amino acids comprising a contiguous sequence of the HLA-B  $\alpha_1$  domain or species analog thereof, wherein amino acids 84 to 86 are YYW (SEQ ID NO: 1).

11. (amended) A method according to Claim 10, wherein said compound is of the formula:

R V/E N/D L R I A/L L R/E Y Y W Q/D S (SEQ ID NO: 3)

wherein the backslashes intend that either amino acid may be present at that position.

13. (amended) A compound comprising an oligopeptide of at least 6 amino acids comprising a contiguous sequence of the HLA-B  $\alpha_1$  domain or species analog thereof, wherein amino acids 84 to 86 are YYW (SEQ ID NO: 1).

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14. (amended) A compound comprising an oligopeptide of at least 8 amino acids comprising the triad YYW (SEQ ID NO: 1) and comprising a contiguous sequence of the sequence:

aa<sup>70</sup> aa<sup>71</sup> Q T aa<sup>74</sup> R aa<sup>76</sup> aa<sup>77</sup> L aa<sup>79</sup> aa<sup>80</sup> aa<sup>81</sup> aa<sup>82</sup> aa<sup>83</sup> Y Y W aa<sup>87</sup> aa<sup>88</sup> aa<sup>89</sup> aa<sup>90</sup> aa<sup>91</sup> (SEQ ID NO: 57).

wherein:

aa<sup>70</sup> is Q, H, S, N or K;

aa<sup>71</sup> is an aliphatic neutral amino acid;

aa<sup>74</sup> is D, Y or H;

aa<sup>76</sup> is E or V;

aa<sup>77</sup> is D, S or N;

aa<sup>79</sup> is R or G;

aa<sup>80</sup> is T, I, N or an aromatic amino acid;

aa<sup>81</sup> is an aliphatic non-polar amino acid;

aa<sup>82</sup> is R, L or an aromatic amino acid;

aa<sup>83</sup> is G or R;

aa<sup>87</sup> is any amino acid;

aa<sup>88</sup> is an aromatic amino acid or aliphatic amino acid of from 5 to 6 carbon atoms;

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aa<sup>89</sup> is any amino acid;

aa<sup>90</sup> is any amino acid; and

aa<sup>91</sup> is any amino acid;

the dimer or at least one amino acid being the D-stereoisomer.

15. (amended)            A compound according to Claim 14, wherein said compound is of the formula:

R V/E N/D L R I A/L L R/E Y Y W Q/D S (SEQ ID NO: 3)

wherein the backslashes intend that either amino acid may be present at that position.

On page 26, immediately preceding the claims, the enclosed text entitled "SEQUENCE LISTING" was inserted into the text.